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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,023	02/21/2002	Jawed Asrar	17396/09057CIP	2905
27530	7590	04/07/2005	EXAMINER	
NELSON MULLINS RILEY & SCARBOROUGH, LLP 1320 MAIN STREET, 17TH FLOOR COLUMBIA, SC 29201			CLARDY, S	
			ART UNIT	PAPER NUMBER
			1617	

DATE MAILED: 04/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/081,023	ASRAR ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	S. Mark Clardy	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2004.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 2,8-17,20-29,64-85,95 and 99 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2,8-10,20-29,64-67,69,71,73,79,80,84,85 and 99 is/are allowed.
- 6) ☒ Claim(s) 11-14,68,70,72,74-76,78,81-83 and 95 is/are rejected.
- 7) ☒ Claim(s) 15-17 and 77 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

✓

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Claims 2, 8-17, 20-29, 64-85, 95, and 99 are pending in this application which is a continuation-in-part (CIP) of US Application 10/026,301, which claims benefit of US Provisional Application 60/257,502, filed December 22, 2000.

Applicants' claims are drawn to a method of increasing vigor and/or yield of plants<sup>1</sup> by treating the plant or its propagation material (claims 24-25: seeds) with a composition comprising a triazole fungicide<sup>2</sup> or a strobilurin fungicide<sup>3</sup>, wherein any fungal pathogen pressure is absent (claim 2). Additional components which may be applied along with the triazole or strobilurin fungicide include silthiofam-type fungicide (claim 8), various microbial inoculants (claims 75-76) such as *Bradyrhizobium japonicum*, and additional fungicides<sup>4</sup> (claim 77). The treated seed is also claimed (claim 95).

In response to the requirement to elect a species for prosecution, applicants elected the species comprising semiconazole as the triazole fungicide, with silthiofam, for treating soybean, which is glyphosate resistant, also treated with captan as an additional fungicide and *Bradyrhizobium* inoculant.

All claims have now been examined.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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<sup>1</sup> See list of crop plants in claim 28 and claims 64-69; corn is in claim 29, soybeans in claim 69, transgenic herbicide (e.g., glyphosate, claim 85) resistant plants in claims 79-81.

<sup>2</sup> See list in claim 10; claims 11-17: fluquinconazole, simeconazole, tebuconazole, tetraconazole, triticonazole, 1-(4-fluorophenyl)-2-(1H-1,2,4-triazole-1-yl)ethanone.

<sup>3</sup> Claims 21-22, 99: azoxystrobin, dimoxystrobin, famoxadone, kresoxim-methyl, metominostrobin, picoxystrobin, pyraclostrobin, trifloxystrobin

<sup>4</sup> Claim 77: fludioxonil, fluquinconazole, difenoconazole, captan, metalaxyl, carboxin, thiram

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The chemical name in claim 11 is incorrect ("H-i,2,4-"). Claims 12-14 depend from "claim ii"; claim 72 depends from "claim 7i". In claims 68, 74-76, 78, and 82, it appears that the letter "i" has been replaced with the symbol "/". In claim 70, the term "the seed" lacks antecedent basis in claim 2. In claims 81 and 83, glufosinate is incorrectly spelled ("glyph-" or "glyf-") or duplicated; imidazolinone is also misspelled; it is unclear what "STS system" refers to.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 95 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combined teachings of Aebi et al (US 5,288,747) and Walter (6,617,330).

Aebi et al teach a method of using a specific stereoisomer of propiconazole as a seed dressing (abstract) which avoids the tendency of triazolyl fungicides to also act as plant growth inhibitors (col 1, line 56 to col 2, line 32). The invention also relates to the seeds thus dressed (col 5, lines 57-62). The compounds may also be combined with other active agents, including additional fungicides (col 6, lines 31-38).

Walter teaches another class of fungicidal materials (abstract) which, as is conventional in the art, may be combined with additional fungicidal agents including those recited herein such as the strobilurins and the "-conazole" fungicides, among others (columns 22-23). The fungicidal compositions may be applied to seeds (col 23, lines 61-65).

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<sup>4</sup> Claim 77: fludioxonil, fluquinconazole, difenoconazole, captan, metalaxyl, carboxin, thiram

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One of ordinary skill in the fungicidal seed dressing art would be motivated to combine these references because Aebi et al disclose the conventional practice of combining fungicidal agents in seed dressings.

Thus it would have been *prima facie* obvious to the ordinary artisan at the time the invention was made to have made a fungicide coated seed because the prior art teaches that fungicidal seed dressings were known, and because the recited fungicides herein were known for that purpose.


Claims 2, 8-10, 20-29, 64-67, 69, 71, 73, 79, 80, 84, 85, and 99 are allowed.

Claims 15-17 and 77 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to S. Mark Clardy whose telephone number is 571-272-0611. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Kunz can be reached on 571-272-0887. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
S. Mark Clardy  
Primary Examiner  
Art Unit 1616

April 1, 2005